

CS-21,376
U.S. Serial No. 10/657,085

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REMARKS

Entry of the foregoing, reexamination and reconsideration of the subject matter identified in caption, as amended, pursuant to and consistent with 37 C.F.R. § 1.111 and in light of the remarks which follow are respectfully requested.

Claims 1-6, 8-12, 14-17 are currently pending in the application and are under consideration, as claims 7, 13, and 18 have been previously canceled.

By the above amendments, claim 1 has been revised to more clearly recite the configuration of the frusta-conical front surface of the target, and claim 17 to correct an informality.

Turning to the "prior art" rejection, claims 1-18 stand rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over Hunt et al '405 (U.S. Patent No. 6,599,405 B2) in view of Hunt et al '367 (U.S. Patent No. 5,674,367). The claims, as amended, cannot be rejected on this basis.

The present invention relates to the field of recessed sputter targets and particularly to a method of manufacturing recessed sputter targets.

Hunt et al '405 is directed to a method of manufacturing a sputter target assembly and to a target assembly. See the claims. As noted by the Examiner, Hunt et al '405 simply does not disclose or fairly suggest a frusta-conically shaped target surface protruding above the planar top surface of the backing plate.

Hunt et al '367 is directed to an apparatus for sputtering thin films onto a substrate, and more particularly, to a sputtering target having a mounted ring which is shrink fit onto the sputtering target. See col. 1, lines 5-10. Hunt et al '367, has been relied on for the alleged disclosure shown in Fig. 7 to cure the deficiencies in Hunt et al '405.

While Hunt et al '367 discloses that side wall 37 of target 38 is tapered, it is designed to increase the integrity of the target rather than extend the life of the target. Moreover, it must be emphasized that in Hunt et al '367 it is not the sputtering surface 40 which is tapered, but the side wall 37. In stark contrast, in the present invention material is added to the front surface of the target, rather than tapering the side walls. In addition, the material is added in a frusta-conical configuration to the front surface of the target, over at least about fifty percent of the front surface of target, so as to extend the target life. These features and benefits are not even remotely suggested by Hunt et al '367. Thus, even if combined in the manner suggested in the Official Action, one of ordinary

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skill in the art would not arrive at the presently claimed invention. Accordingly, withdrawal of this rejection is believed to be in order and it is respectfully requested.

From the foregoing, further and favorable action in the form of a Notice of Allowance is believed to be next in order, and such action is earnestly solicited.

If the Examiner has any questions or concerns regarding this Amendment or the application in general, he is invited to contact the undersigned at his earliest convenience.

Respectfully submitted,



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